

[0417] **Lock ID.** The Lock ID identifies the lock that is applied to a specified Entity.

[0418] **Entity Class ID.** The Entity Class ID identifies the Entity class that is affected by a lock. If the Entity ID is 0, a lock applies to the entire Entity class. If the Entity ID is greater than 0, the Entity Class ID and Entity ID together form a global Entity identifier, which identifies an Entity affected by the lock.

[0419] **Entity ID.** The Entity ID 2013 identifies a specific Entity (within an Entity class) that is affected by a lock.

10 [0420] Each lock affects a specified collection of Attributes and a specified selection of Attributes of those Entities. The Lock Attributes table 2020 records the Attributes that are affected by a lock.

[0421] **Lock ID.** The Lock ID identifies the lock that is applied to a specified Attribute.

15 [0422] **Attribute ID.** The Attribute ID identifies the Attribute to which a lock applies.

[0423] In an alternative embodiment, the system and method may be integrated with a sea or shipping lane information system, or for an air traffic control lane information system. In other words, an anchor section may be representative of an air 20 lane section or shipping lane section, and is not limited to a road section. Any real world model that lends itself to related linear data and spatial data may be implemented. It will be apparent to one skilled in the art that the Entities and

Attributes of the above described Entity-Attribute data model may be modified to represent physical linear and spatial data and correlated with appropriate Attributes for the specific Entity. For instance, a shipping lane would have a geo-coordinate as does a road section, but instead of a pavement type Attribute it might have a water

- 5 depth or water temperature Attribute. An air traffic lane might have an Attribute specifying minimum altitude or ground terrain.

- [0424]** Various preferred embodiments of the invention have been described in fulfillment of the various objects of the invention. It should be recognized that these embodiments are merely illustrative of the principles of the invention. Numerous 10 modifications and adaptations thereof will be readily apparent to those skilled in the art without departing from the spirit and scope of the present invention.